137 Northpark Blvd. • Covington, LA 70433
TELEPHONE (985) 276-6100 • FAX (985) 276-6279

March 26, 2013

Mr. Sanford Phillips, Assistant Secretary
Louisiana Department of Environmental Quality
Office of Environmental Services
Water Permits Division
P.O. Box 4313
Baton Rouge, Louisiana 70821-4313

RE: LOOP LLC
Deepwater Port Complex
LPDES Permit No. LA0049492
Agency Interest No. 4634

Dear Mr. Phillips:

LOOP LLC hereby submits an application for renewal of its Louisiana Pollutant Discharge Elimination System (LPDES)/National Pollutant Discharge Elimination System (NPDES) Permit No. LA0049492 issued jointly by Louisiana Department of Environmental Quality and U. S. Environmental Protection Agency. In accordance with permit requirements, this request is being submitted 180 days prior to the expiration date of the permit allowing the current permit to be administratively continued until it is renewed. LOOP will continue to operate under the existing permit conditions until a renewed permit is issued by the agencies. One original and one copy of the application are being submitted.

If you have any questions or need further information, please do not hesitate to contact me at (985) 276-6299.

Sincerely,

Cynthia A. Gardner-LeBlanc
Senior Regulatory Representative

(Enclosure)

cc: Claudia V. Hosch, Associate Director
U. S. Environmental Protection Agency
Dale Sittig, Executive Director
Louisiana Offshore Terminal Authority (w/o enclosure)
Captain Jonathan Burton, Captain of the Port
USCG MSU Morgan City (w/o enclosure)

LOOP LLC
DEEPWATER PORT COMPLEX

APPLICATION FOR RENEWAL OF LPDES PERMIT NO. LA0049492 AI NO. 4634

MARCH 2013

PREPARED BY:

C-K Associates, LLC
17170 Perkins Road
Baton Rouge, Louisiana 70810
(225) 755-1000

C-K Associates' Project No. 8873

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1.0 INTRODUCTION

1.1 Background

The LOOP LLC (LOOP) Deepwater Port Complex consists of an offshore petroleum offloading terminal located in federal waters 18 miles south of Grand Isle, Louisiana as well as onshore pipeline and storage facilities. The onshore portion of the facility is located in Lafourche Parish, Louisiana. LOOP is currently operating under joint National Pollutant Discharge Elimination System (NPDES)/Louisiana Pollutant Discharge Elimination System (LPDES) Permit No. LA0049492 which was issued by the Louisiana Department of Environmental Quality (DEQ) and the U.S. Environmental Protection Agency (EPA) on September 12, 2008 with an effective date of October 1, 2008. A major modification was issued by DEQ and EPA on March 23, 2012. LOOP's Federal Tax Identification number is 72-1335490.

The following information and EPA Application Form 1 (General Information), Form 2C (Wastewater Discharge Information), Form 2F (Storm Water Discharges Associated with Industrial Activity are submitted in accordance with the requirements of Louisiana Administrative Code (LAC) at LAC 33:IX.2501, 2503, and 2511 in Appendices A, B, and C, respectively. In addition, Signatory Requirements, Responses to the Environmental Impact Questionnaire, and LAC 33:I.1701 Requirements are included in Appendices D, E, and F, respectively.

1.2 Site Location

The LOOP Operations Center and Warehouse are located at 224 East 101st Place, Cutoff, Louisiana. The geographic coordinates of the front gate are latitude 29° 27' 45" and longitude 90° 18' 20". The LOOP onshore facilities are located in Lafourche Parish and the offshore facilities are located in state and federal waters of the Gulf of Mexico. Figure 1 is a Vicinity Map which depicts these facilities.

Figures 2 through 13 depict the onshore and offshore facilities. Also, these figures depict the outfall locations, receiving water bodies, and active water wells within a one-mile radius of the center of the facility that are registered with the Louisiana Department of Transportation and Development (DOTD). A list of these wells is included on the site location maps. Abandoned wells, destroyed wells, plugged wells, monitor wells, test holes, piezometers, observation wells, and recovery wells are not included.

1.3 Facility Description

LOOP operates an offshore petroleum offloading terminal and onshore pipeline and storage facilities for the transportation of crude oil. Crude oil is offloaded from supertankers at the port and transported via pipeline to the Clovelly Dome Storage Terminal Facility and Clovelly Tank Facility. These storage facilities provide

interim storage for crude oil before it is delivered via pipelines to petroleum refineries. The Clovelly Dome Storage Terminal Facility uses brine, stored in a 280-acre Brine Storage Reservoir, to displace crude oil from the caverns for injection into the pipelines. LOOP also operates the Small Boat Harbor facility, Fourchon Booster Station, and Operations Center and Warehouse in support of the activities at the facility. LOOP is classified under Standard Industrial Classification (SIC) Code 4612- Crude Petroleum Pipelines, 4491- Marine Cargo Handling, and 5171- Petroleum Bulk Stations and Terminals.

2.0 SUMMARY OF WASTEWATER DISCHARGES

2.1 Description of Outfalls

LOOP is currently authorized to discharge wastewaters from 18 final outfalls (001, 002, 004, 005, 006, 007, 008, 012, 015, 018, 020, 021, 023, 024, 025, 026, 027, and 028). Figure 14 is a Water/Wastewater Flow Balance Diagram which contains the wastewater flow rates from each outfall and the contributing sources.

- Outfall 001 consists of the intermittent discharge of storm water from the oily water system from the Marine Terminal. Storm water is routed through an oil/water separator and discharged to the Gulf of Mexico.

- Outfall 002 consists of the intermittent discharge of treated sanitary wastewater from the Control Platform from the Marine Terminal to the Gulf of Mexico. Wastewater is treated in a sewage treatment plant (extended aeration/activated sludge).

- Outfall 004 consists of the intermittent discharge of brine from the Brine Storage Reservoir through a multi-port diffuser to the Gulf of Mexico. Outfall 004 rarely discharges, but does during periods of excessive rainfall when surplus inventory is needed to be discharged in order to maintain a safe operating level in the reservoir.

- Outfall 005 consists of the intermittent discharge of marine cargo hose testing water, wash water from oil spill equipment cleaning activities, and storm water runoff from the Small Boat Harbor to Bayou Lafourche. The marine cargo hose testing water and wash water from oil spill equipment cleaning activities is routed through an oil/water separator prior to discharge.

- Outfall 006 consists of the intermittent discharge of treated sanitary wastewater from the Small Boat Harbor to Bayou Lafourche. Wastewater is treated in a sewage treatment plant (extended aeration/activated sludge) and routed to an authorized sanitary drain field. A discharge would only occur during maintenance or an emergency.

- Outfall 007 consists of the intermittent discharge of treated sanitary wastewater from the Operations Center and Warehouse to Breton Canal. Wastewater is treated in a sewage treatment plant (extended aeration/activated sludge) and routed to an authorized sanitary drain field. A discharge would only occur during maintenance or an emergency.

- Outfall 008 consists of the intermittent discharge of treated sanitary wastewater from the Clovelly Dome Storage Terminal Facility to Little Lake. Wastewater is treated in a sewage treatment plant (extended aeration/activated sludge) and routed to an authorized sanitary drain field. A discharge would only occur during maintenance or an emergency.

- Outfall 012 consists of the intermittent discharge of storm water runoff from the Clovelly Dome Storage Terminal Facility to Little Lake.

- Outfall 015 consists of the continuous discharge of non-contact cooling water from the Pumping Platform form the Marine Terminal to the Gulf of Mexico. Wastewater undergoes chlorination.

- Outfall 018 consists of the intermittent discharge of storm water runoff from the Fourchon Booster Station to Bayou Moreau.

- Outfall 020 consists of the intermittent discharge of storm water from secondary containment around fuel tanks from the Operations Center and Warehouse to Breton Canal.

- Outfall 021 consists of the intermittent discharge of storm water from the Clovelly Tank Facility to the LL&L Canal.

- Outfall 023 consists of the intermittent discharge of treated sanitary wastewater from the Fourchon Booster Station to Bayou Moreau. Wastewater is treated in a sewage treatment plant (extended aeration/activated sludge) and undergoes chlorination.

- Outfall 024 consists of the intermittent discharge of treated sanitary wastewater from the Clovelly Tank Facility to the LL&L Canal. Wastewater is treated in a sewage treatment plant (extended aeration/activated sludge) and undergoes chlorination.

- Outfall 025 consists of the intermittent discharge of storm water runoff from the Clovelly Tank Facility to LL&L Canal.

- Outfall 026 consists of the intermittent discharge of storm water runoff from the Clovelly Tank Facility to Reservoir Canal.

- Outfall 027 consists of the intermittent discharge of storm water runoff from the Clovelly Tank Facility to Reservoir Canal.

- Outfall 028 consists of the intermittent discharge of storm water runoff from the Clovelly Tank Facility to LL&L Canal.

Additional portions of the facility discharge storm water associated with industrial activity via sheet flow or discharge storm water that is not associated with industrial activity.

2.2 Wastewater-related Information

Structural controls used to minimize the potential for storm water contamination include containment dikes/berms around significant materials handling areas and storage areas. Sloping and grading of pads and roads are used to direct storm water to drains or drainage ditches. LOOP employs numerous operational practices to avoid and/or contain any potential leaks or spills. If any materials are spilled or released during loading/unloading operations, the materials are contained and cleaned up immediately.

Non-structural measures employed at the facility that help in the management of storm water include:

- Storm Water Pollution Prevention Plan;
- Safety Procedures Manual;
- Facility Response Plan;
- Environmental and Housekeeping Inspections;
- Employee Safety and Environmental Training Programs; and
- Equipment Preventive Maintenance Programs.

These programs have defined schedules which encourage awareness of the importance of storm water management and required operational equipment tests and repairs that help to minimize the potential for spills or releases. Significant materials are stored and handled in such a manner to minimize impacts to storm water. Bulk storage tank containment systems are designed and maintained in accordance with state and federal regulations. Table 1 is a List of Significant Materials in Storage Tanks at the LOOP facilities. Figures 2 through 13 depict the locations where significant materials are stored, existing structural controls (*i.e.*, berms, dikes), and impervious areas including paved areas and buildings which account for approximately 20% of the surface area.

Commercially-approved herbicides are applied by a licensed contractor around buildings and fences on an as-needed basis to control weeds and vegetation. Pesticides are not applied at the LOOP facilities. Table 2 is a List of Herbicides which is currently used at the LOOP facilities.

Table 3 is a Summary of Biomonitoring Results. For all tests conducted from 2010 through 2012, survival testing for both species was demonstrated not to be significantly less than the control (*i.e.,* passed). Table 4 is a List of Spills and Leaks to the ground or surface water during the last three years.

3.0 SAMPLING AND ANALYSIS CONSIDERATIONS

LOOP conducted sampling and analysis for this permit application in accordance with all applicable regulations. Outfalls 002, 004, 015, 023, and 024 were sampled on January 17, 2013 under dry weather conditions (Form 2C). Effluent characterization data for Outfalls 002, 004, 015, 023, and 024 are provided for all parameters in accordance with Subsection H (non-process wastewater) of LAC 33:IX.2501. Outfalls 006, 007, and 008 were not sampled because treated sanitary wastewaters from these locations are typically routed to authorized drain fields. A surface discharge would only occur during maintenance or an emergency. Temperature for Outfalls 002 and 015 is not included because these outfalls are located offshore and measurement is difficult. Chemical Oxygen Demand (COD) for Outfall 015 is not included because of the high level of chlorides in the source water prevented the analytical laboratory from performing the analysis without interference.

Outfalls 012, 018, 021, 026, and 028 were sampled under wet weather conditions (Form 2F) on January 17, 2013. Outfall 005 was sampled on January 31, 2013. Outfall 001 was not sampled because it is located offshore and 45 feet below the surface of the water. Outfall 020 was not sampled because it rarely discharges. Outfall 025 was not sampled because the effluent quality is considered to be substantially identical to Outfall 021. Outfall 027 was not sampled because it is not currently operational. Storm water effluent data for Outfalls 005, 012, 018, 021, 025, 026, and 028 are provided for Total Organic Carbon (TOC), oil and grease, and pH from routine compliance monitoring from January 2011 through December 2012 (two years).

4.0 REQUESTED PERMIT CONDITIONS

LOOP requests the following changes to the permit:

1) Change monitoring frequency for Total Dissolved Solids (TDS) at Outfall 004 from once per week (when discharging) to once per month (when discharging) so that it is consistent with the monitoring frequency for chloride at Outfall 004 (once per month).
2) Change monitoring frequency for flow, TOC, oil and grease, and pH at Outfall 005 from once per month (when discharging) to once per quarter (when discharging) based on LOOP's excellent compliance history at Outfall 005 and LDEQ's permitting policy for storm water monitoring.
3) Change monitoring frequency for Total Residual Chlorine (TRC) at Outfall 015 from once per week to once per month based on LOOP's excellent compliance history at Outfall 015 and so that it is consistent with the monitoring frequency for all of the other parameters at Outfall 015.

TABLES

TABLE 1

LIST OF SIGNIFICANT MATERIALS IN STORAGE TANKS

TABLE 1

LIST OF SIGNIFICANT MATERIALS IN STORAGE TANKS

TANK IDENTIFICATION	LOCATION	CONTENTS	VOLUME (Gallons)
1-99 Tank 6401	Clovelly Dome	Crude Oil	25,200,000
2-99 Tank 6402	Clovelly Dome	Crude Oil	25,200,000
8-07 Tank 6403	Clovelly Dome	Crude Oil	25,200,000
9-07 Tank 6404	Clovelly Dome	Crude Oil	25,200,000
3-99 Tank 6405	Clovelly Dome	Crude Oil	25,200,000
4-99 Tank 6406	Clovelly Dome	Crude Oil	25,200,000
10-07 Tank 6407	Clovelly Dome	Crude Oil	25,200,000
11-07 Tank 6408	Clovelly Dome	Crude Oil	25,200,000
6-02 Tank 6409	Clovelly Dome	Crude Oil	25,200,000
7-02 Tank 6410	Clovelly Dome	Crude Oil	25,200,000
12-07 Tank 6411	Clovelly Dome	Crude Oil	25,200,000
13-07 Tank 6412	Clovelly Dome	Crude Oil	25,200,000
15-07 Tank 6414	Clovelly Dome	Crude Oil	25,200,000
17-10 Tank 6416	Clovelly Dome	Crude Oil	25,200,000
18-10 Tank 6417	Clovelly Dome	Crude Oil	25,200,000
1-78 Crude Relief Tank	Clovelly Dome	Crude Oil	2,310,000
5-78 Slop Oil Tank	Small Boat Harbor	Slop Oil	79,315
11-78 Tank 1	Fourchon Booster Station	No. 2 Fuel	1,180,000
13-78 Tank 2	Fourchon Booster Station	No. 2 Fuel	1,180,000
23-88 Tank 1	Operations Center	Gasoline	1,000
24-88 Tank 2	Operations Center	Gasoline	1,000
2-78	Clovelly Dome	Diesel Fuel	8,200
22-78	Clovelly Dome	Diesel Fuel	8,200
25-88 Tank 3	Operations Center	Diesel Fuel	550
26-88 Tank 4	Operations Center	Diesel Fuel	4,000
27-88 Tank 5	Fourchon Booster Station	Diesel Fuel	1,000
28-88 Tank 6	Fourchon Booster Station	Diesel Fuel	322
29-88 Tank 7	Fourchon Booster Station	Diesel Fuel	560
30-88 Tank 8	Clovelly Dome	Diesel Fuel	80
31-88 Tank 9	Clovelly Dome	Diesel Fuel	115
32-88 Tank 10	Clovelly Dome	Slop Oil	2,000
34-88 Tank 12	Small Boat Harbor	Diesel Fuel	260
36-89	Clovelly Dome	Diesel Fuel	94
37-91	Small Boat Harbor	Diesel Fuel	564

TABLE 2

LIST OF HERBICIDES

TABLE 2

LISTS OF HERBICIDES

PRODUCT NAME	COMPONENT	USE
Target 6 Plus	Monsodium Methanearsonate	Herbicide
Krovar	Bomacil, Diuron	Herbicide
GlyStar	Glyphosate	Herbicide
Weedar 64	Dimethylamine Salt	Herbicide
Reward	Diquat Dibromide	Aquatic Herbicide
Oust XP	Sulfometuron Methyl	Herbicide

TABLE 3

SUMMARY OF BIOMONITORING RESULTS

TABLE 3

SUMMARY OF BIOMONITORING RESULTS

TEST DATE	OUTFALL	TEST TYPE	CRITICAL DILUTION	MYSIDOPSIS BAHIA		MENIDIA BERYLLINA	
				SURVIVAL NOEC	COMPLIANCE	SURVIVAL NOEC	COMPLIANCE
March 2010	015	Acute	2.8%	3.7%	Pass	3.7%	Pass
June 2010	015	Acute	2.8%	3.7%	Pass	3.7%	Pass
September 2010	015	Acute	2.8%	3.7%	Pass	3.7%	Pass
December 2010	015	Acute	2.8%	3.7%	Pass	3.7%	Pass
March 2011	015	Acute	2.8%	3.7%	Pass	3.7%	Pass
June 2011	015	Acute	2.8%	3.7%	Pass	3.7%	Pass
September 2011	015	Acute	2.8%	3.7%	Pass	3.7%	Pass
December 2011	015	Acute	2.8%	3.7%	Pass	3.7%	Pass
March 2012	015	Acute	2.8%	3.7%	Pass	3.7%	Pass
June 2012	015	Acute	2.8%	3.7%	Pass	3.7%	Pass
September 2012	015	Acute	2.8%	3.7%	Pass	3.7%	Pass
November 2012	015	Acute	2.8%	3.7%	Pass	3.7%	Pass

Note: The following effluent concentrations were used for testing: 1.2%, 1.6%, 2.1%, 2.8%, and 3.7%. The critical low flow was 2.8%.

TABLE 4

LIST OF SPILLS AND LEAKS

TABLE 4

LIST OF SPILLS AND LEAKS

DATE	LOCATION	MATERIAL	AMOUNT (Gallons)
01-06-10	CDST –Injection Station – Stem seal failure on Flow Valve 4021, the suction valve for Pump 6914.	Oil	0.002
01-26-10	CDST – Injection Station Sump overflowed due to valve in 6-inch drain line malfunctioning. There was also a pinhole leak in same line.	Oil	8,484
02-01-10	CDST – Injection Station – Seal failed on Pump 6916 allowing crude oil to flow into the lube oil system. The lube oil system overflowed into the drain pan which overflowed.	Crude Oil	5
03-05-10	LOCAP Meter skid (LOOP System) – A hole in the drain line when it was being blown-out allowing crude oil to splash into drain pan with some entering waterway.	Crude Oil	0.0002
03-10-10	CDST – A stem seal leak on Flow Valve 5054. A bucket with lid set up as a secondary containment in the event of a stem seal leak from this valve overflowed.	Oil	0.009
03-31-10	CDST- 30" Control Valve PCV 6415 had leaking stem seal. Valve is located south of Injection Station and controls flow to the Clovelly Tank Facility (injection valve).	Oil	1.65
04-20-10	CDST FV-8064, LOCAP Blend Valve. Packing Gland Grease that had accumulated on the body of the valve in the area of the Chevron Packing washed into the water during a rain storm.	Oil & Grease	0.017
05-04-10	CDST – While removing the Cavern 14 crude oil trunk line, sludge, oil and water in the pipe spilled onto a barge with some getting into the adjacent water.	Crude Oil	5.9

TABLE 4

LIST OF SPILLS AND LEAKS
(cont.)

DATE	LOCATION	MATERIAL	AMOUNT (Gallons)
06-21-10	CDST- An area of corrosion on an abandoned 2-inch densitometer line underneath the TPI meter skid failed due to thermal expansion. Crude oil left in the line leaked through the failure.	Crude Oil	0.08
07-08-10	CDST – Cavern 11 Well 2 – Cavern wellhead valve closed for pressure test and ESD valve closed for 29-M test. Small space between valves allowed thermal buildup which caused the flange to leak a few drips of oil. The leak stopped before the pressure was relieved. Wellhead valve re-pressured to cavern pressure but did not leak again.	Crude Oil	0.00002
08-09-10	CDST –Diesel Fire Pump Platform – Valve on fill line from 8,000 gallon diesel tank to fire pump platform day tank leaked overflowing tank and drip pan under tank. The leak was thought to be due to thermal expansion. The valve was replaced and a pressure relief valve will be placed in the diesel line.	Diesel	0.036
9-17-10	CDST – Cavern Manifold Main Hydraulic Unit – Hydraulic unit leaked into drain pan and elbow fitting in drain line from pan had a crack and leaked lube oil into the water.	Lube Oil	0.00006
10-13-10	CDST – Stem packing failure on flow valve 4020B formed a light to gray colored sheen 150-40 ft. covered approx 30%. This was a MOL bypass valve.	Oil	0.041
10-28-10	MT – SPM 103 – 10-inch diameter footprints were noted by the Mooring Master coming up approximately every 3 minutes. Source of footprints could not be immediately identified so tanker was moved to another buoy. Footprints stopped once pressure off system. Further investigation (11/3/2010) indicates leak was from starboard check valve.	Oil	0.00003
01-19-11	CDST – Cavern 3 – Crude line to Cavern 3 was blind flanged due to work being completed subsurface. The blind flange leaked due to thermal expansion. Oil dripped into pre-boomed area and dissipated naturally.	Crude Oil	0.00001

TABLE 4

LIST OF SPILLS AND LEAKS
(cont.)

DATE	LOCATION	MATERIAL	AMOUNT (Gallons)
01-25-11	CDST – Cavern 3- Piping/equipment removed from Cavern 3 was covered in plastic and placed on deck barge during workover operations. Plastic bag covering ESD valve came open during thunderstorms allowing rainwater into the bag. The oily water ran off the barge into the water. Barge was boomed off and sheen cleaned with pads.	Crude Oil	0.0009
02-23-11	CDST – Cavern 3 – Hydraulic tubing on ESD valve of center well leaked hydraulic fluid.	Hydraulic Fluid	0.00001
3-25-11	SPM 103 – While removing a hose during a hose change-out on SPM 103, a small bubble of crude oil escaped creating a 1.5 mi. by 300ft light silver sheen. The oil evaporated naturally and no containment or recovery operations were taken.	Crude Oil	4.3
5-14-11	CDST – Cavern 4, Well 3 – A crack in the metal plate between the 48-inch and 36-inch casing has seep (a drop every 2 to 3 minutes on a periodic basis – appears to be tidally driven) coming from it that forms a very light, barely visible film on the water.	Crude Oil	0.00001
06-01-11	SPM 103 – Leak appeared as a bubble breaking the surface approximately every 10 seconds in the form of 12-inch diameter very light sheen. Further investigation identified the source as a leak in a hydraulic jumper line that opens and closes the SALM valves.	Oil	0.012
06-23-11	Cavern 11 Well 1 – Hydraulic Oil leaked due to a seal failure on a piston inside the actuator. The area was boomed off and the hydraulic oil was contained.	Hydraulic Oil	.002
07-27-11	CDST – CAM Delivery Skid – FV 8581 had been drained to be pulled for repair. When valve body was pulled, a small amount of oil trapped in valve hit drip and splashed into water.	Oil	0.00009
08-16-11	MT Pumping Platform – Dolphin Services spill oil on scaffolding from a pump suction hose when removing equipment following completion of a drain line replacement. In the process of cleaning the scaffolding a small amount of oil was washed in to the water.	Oil	0.0001

TABLE 4

LIST OF SPILLS AND LEAKS
(cont.)

DATE	LOCATION	MATERIAL	AMOUNT (Gallons)
08-19-11	MT SPM 104 – ¼ inch NPT port was broken off on port and starboard side of upper swivel. The fitting was associated with the leak detection ports.	Oil	0.028
09-25-11	CDST Cavern 8 Center Well – The seals on the hydraulic ram for the ESD valve failed while the valve was being activated in preparation for the brine work.	Hydraulic Oil	0.006
01-06-12	CDST – Cavern 3 – ESD valve leaked several drops of hydraulic oil into the water. The oil was cleaned off with sorbent pads and the area was boomed off. The oil dissipated naturally.	Hydraulic Oil	0.00003
01-19-12	CDST – Filling and venting line from Exxon Skid to CAM Skid. Operator removed hose from drum line was venting into to check for oil. The oil arrived and spray over operator, grating and water.	Oil	0.07
1-21-12	CDST – LOCAP jet mixer pump – Operator was performing maintenance, opened a drain valve and connected a high pressure hose. Operator opened ball valve at the other end of the hose to release pressure and the valve failed splashing oil on the operator, drum and grating. A silver sheen was noted in the water and dissipated naturally.	Oil	0.0003
2-23-12	CDST – Crude Transfer – Pinhole leak in 4-inch discharge line off of sump pump. Spill formed 1' X 6' sheen in pre-boomed area. Spill was removed with absorbent pads.	Oil	0.00001
3-19-12	SBH – While sandblasting the winch for painting a pinhole area of corrosion was opened in the hydraulic oil tank allowing hydraulic to drip into Bayou Lafourche. The hole was immediately plugged stopping the leak. The entire winch system has been removed from the platform pending final repair to completely eliminate the potential of any further leakage.	Hydraulic Oil	0.0001
3-22-12	CDST Cavern Manifold – A pinhole leak developed in the 6-inch drain on the Cavern 11 Manifold Log. The leak was in a flange adjacent to the drain line isolation valve. The spill was contained by operations personnel and clean-up affected with the assistance of USES.	Crude Oil	21

TABLE 4

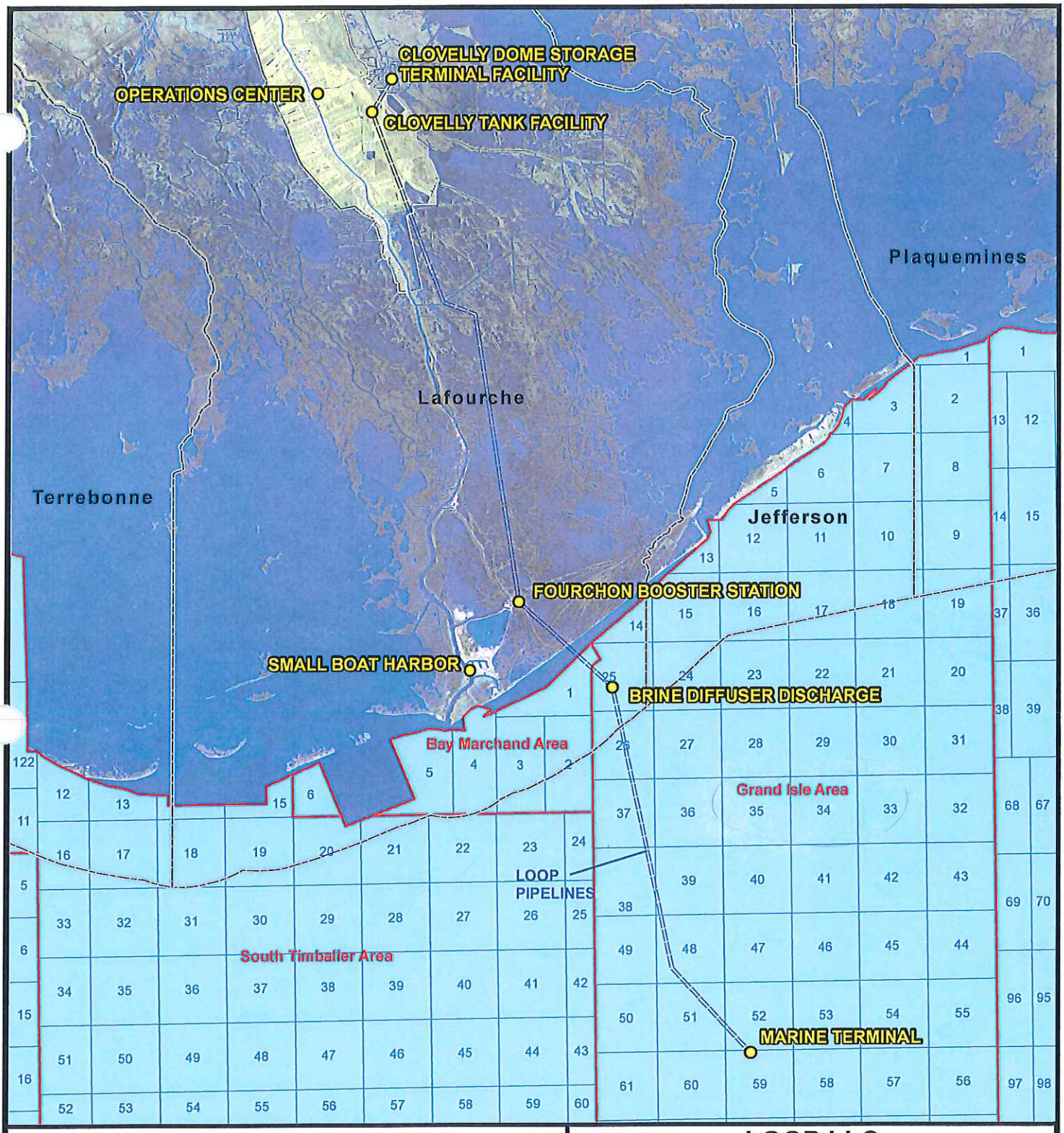
LIST OF SPILLS AND LEAKS
(cont.)

DATE	LOCATION	MATERIAL	AMOUNT (Gallons)
3-26-12	CDST Injection Station – Hydraulic tubing on Flowvalve 4192 down stream of the Injection Station failed releasing hydraulic oil from the tank on the hydraulic unit. Spill was boomed off and cleaned with absorbent pads.	Hydraulic Oil	1.8
5-1-12	CDST Incoming – Pinhole leak in weld on 30-inch delivery line from 42-inch incoming line to vertical pump station. Leak was in the 6:00 position at the weld that joins the 90° elbow to the pipe.	Crude Oil	0.0015
7-8-12	MT SPM 103 – While dewatering the hose string removed from SPM 103 for a hose change out, some oily water splashed over board from the LOOP Lifter forming a barely visible.	Oil	0.0001
7-12-12	CDST Incoming MOL – New corrosion coupon installed on 7-11-12 developed a leak in the stem packing. The leak formed a very light sheen. The leak was isolated and the corrosion coupon removed and replaced with a plug.	Crude Oil	0.0003
8-2-12	CDST Cavern 10 – Quick connect fitting on hydraulic jack failed while jacking up Cavern 10 brine riser.	Hydraulic Oil	0.00002

FIGURES

FIGURE 1

VICINITY MAP



N
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Miles

Reference

IMAGERY: LANDSAT 2002 LA

esri Partner Network Silver

LOOP LLC

DEEPWATER PORT COMPLEX

LPDES PERMIT RENEWAL APPLICATION

VICINITY MAP

LAFOURCHE PARISH

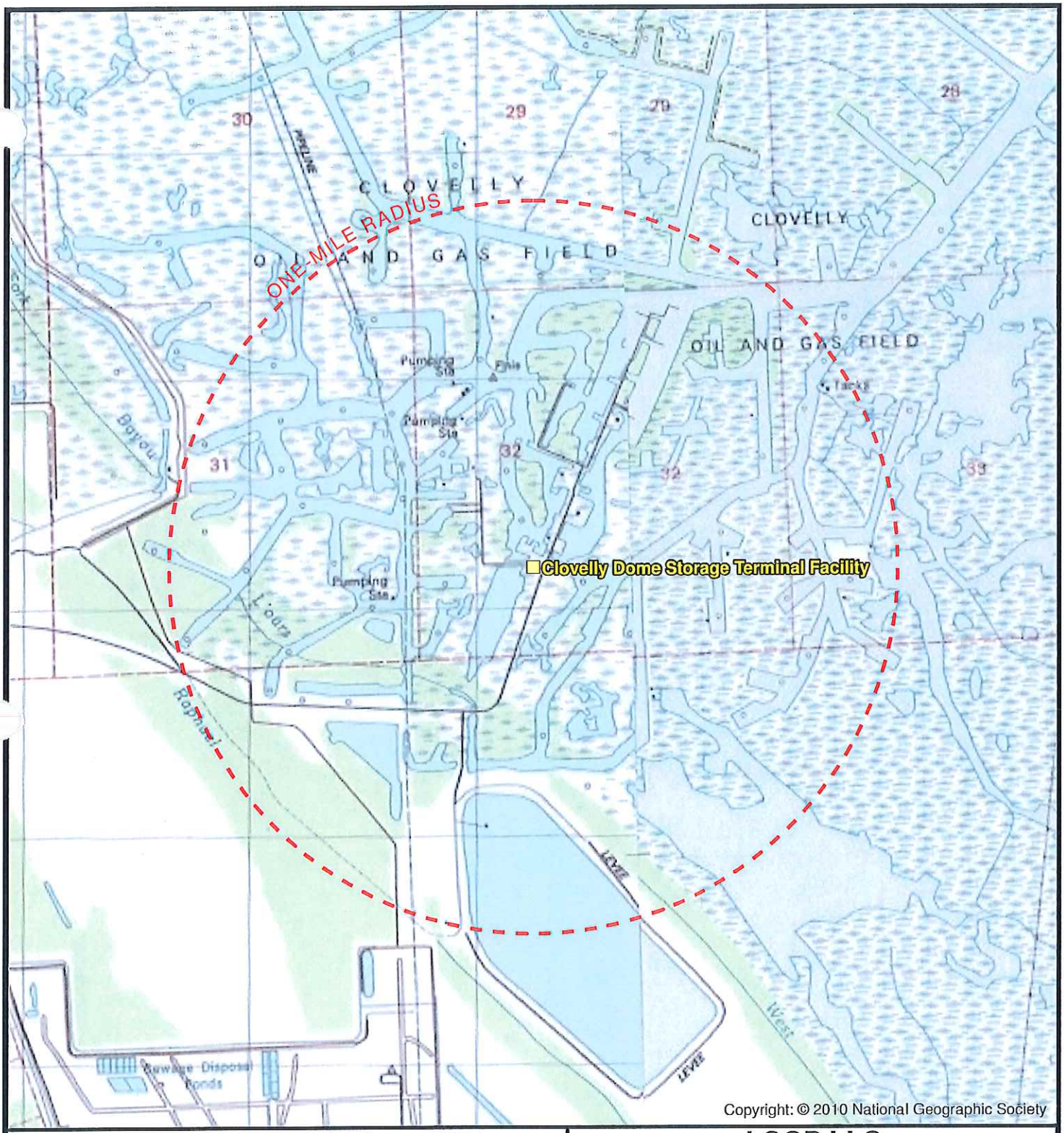
C-K ASSOCIATES, LLC
ENVIRONMENTAL & ENGINEERING CONSULTANTS

Drawn:	CAL/AM10.1
Checked:	WCD
Approved:	DJL
Date:	1/3/13
Dwg. No.:	A8873-01

FIGURE 1

FIGURE 2

CLOVELLY DOME STORAGE TERMINAL FACILITY- 1



N
W E
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2,000 1,000 0
Feet

Reference

USGS 7.5 MINUTE QUADRANGLE MAP. GOLDEN MEADOW, LA.

esri Partner Network Silver

LOOP LLC

DEEPWATER PORT COMPLEX

LPDES PERMIT RENEWAL APPLICATION

CLOVELLY DOME STORAGE TERMINAL FACILITY - 1

LAFOURCHE PARISH

C-K ASSOCIATES, LLC
ENVIRONMENTAL & ENGINEERING CONSULTANTS

Drawn:	CAL/AM10.1
Checked:	WCD
Approved:	DJL
Date:	1/3/13
Dwg. No.:	A8873-02

FIGURE 2

FIGURE 3

CLOVELLY DOME STORAGE TERMINAL FACILITY- 2

Legend

- OUTFALL LOCATION
- FLOW DIRECTION

N
W E
S

500 250 0
Feet

Reference

IMAGERY 2005 COLOR INFRARED DIGITAL ORTHOPHOTO QUAD FROM STATE OF LOUISIANA (LOSCO).

esri Partner Network Silver

LOOP LLC

DEEPWATER PORT COMPLEX

LPDES PERMIT RENEWAL APPLICATION

CLOVELLY DOME STORAGE TERMINAL FACILITY - 2

LAFOURCHE PARISH

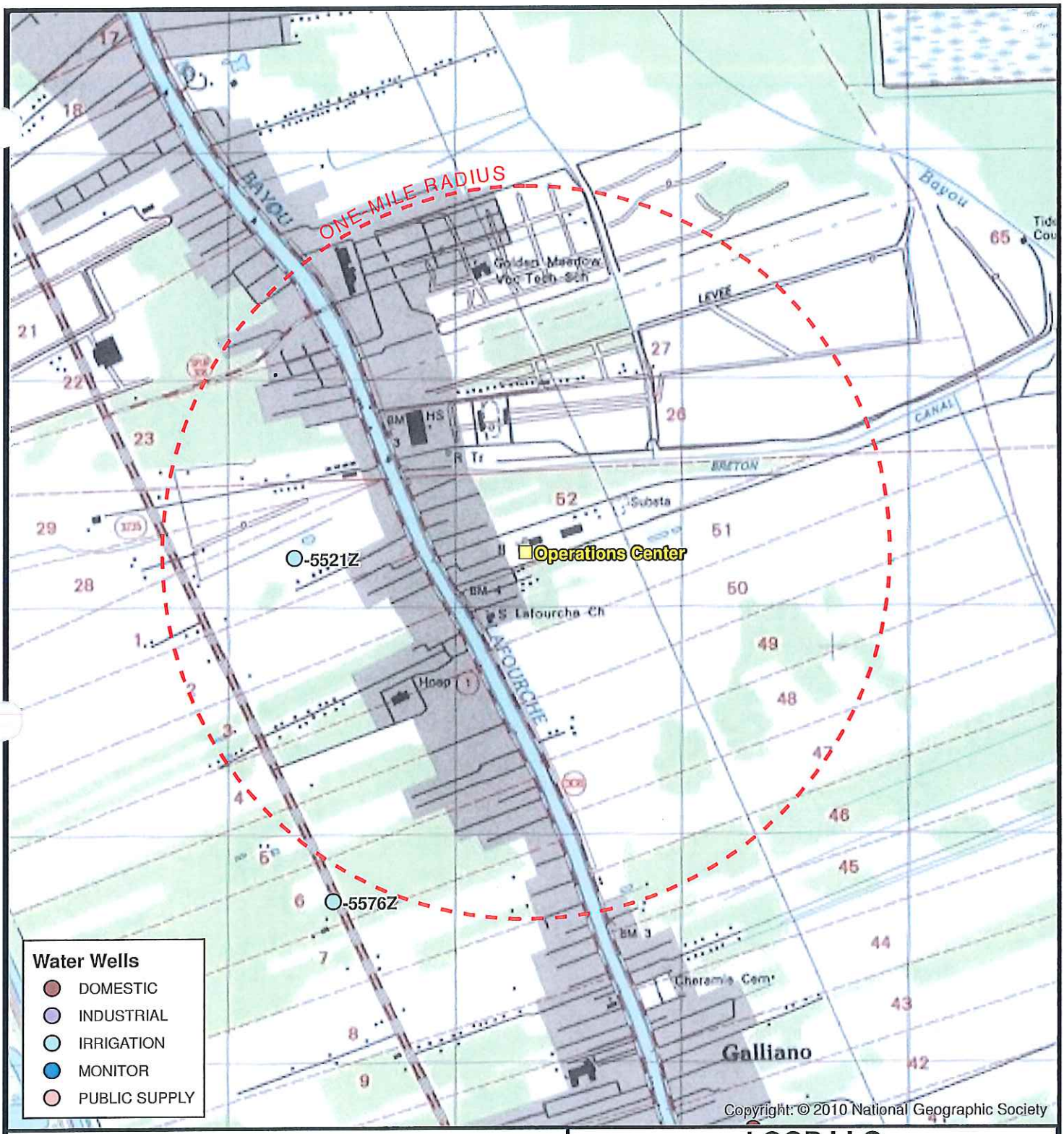
C-K ASSOCIATES, LLC
ENVIRONMENTAL & ENGINEERING CONSULTANTS

Drawn:	CAL/AM10.1
Checked:	WCD
Approved:	DJL
Date:	1/3/13
Dwg. No.:	A8873-03

FIGURE 3

FIGURE 4

OPERATIONS CENTER AND WAREHOUSE- 1



2,000 1,000 0

Feet

Reference

USGS 7.5 MINUTE QUADRANGLE MAP. GOLDEN MEADOW, LA.

esri Partner Network Silver

LOOP LLC

DEEPWATER PORT COMPLEX

LPDES PERMIT RENEWAL APPLICATION

OPERATIONS CENTER AND WAREHOUSE - 1

LAFOURCHE PARISH

C-K ASSOCIATES, LLC

ENVIRONMENTAL & ENGINEERING CONSULTANTS

Drawn:	CAL/AM10.1
Checked:	WCD
Approved:	DJL
Date:	1/3/13
Dwg. No.:	A8873-04

FIGURE 4

FIGURE 5

OPERATIONS CENTER AND WAREHOUSE- 2

Legend

- OUTFALL LOCATION
- FLOW DIRECTION

N
W E
S

300 150 0
Feet

Reference

IMAGERY 2010 NAIP, LOUISIANA 1M.

esri Partner Network Silver

LOOP LLC
DEEPWATER PORT COMPLEX

LPDES PERMIT RENEWAL APPLICATION

OPERATIONS CENTER AND WAREHOUSE - 2

LAFOURCHE PARISH

C-K ASSOCIATES, LLC
ENVIRONMENTAL & ENGINEERING CONSULTANTS

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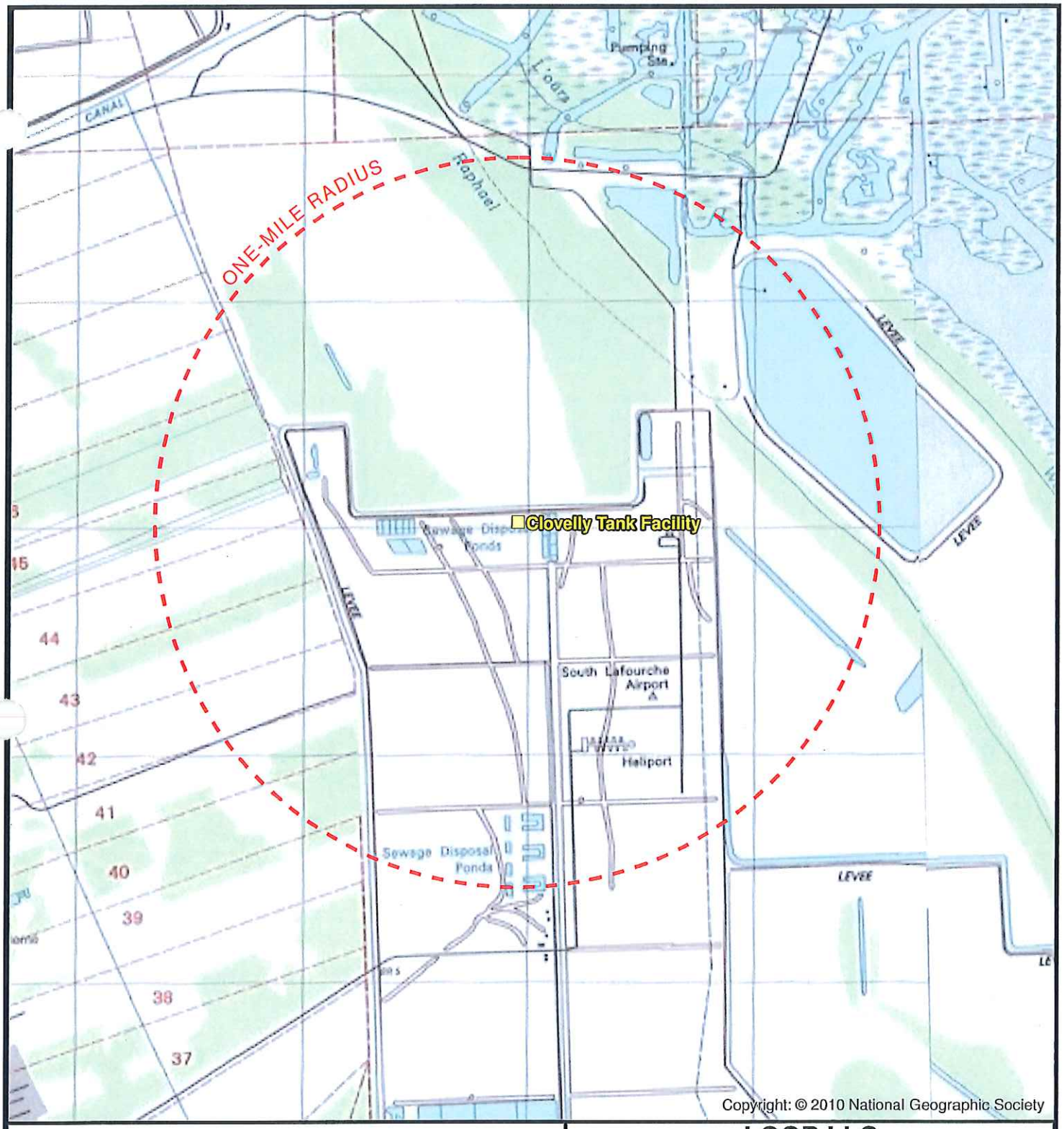
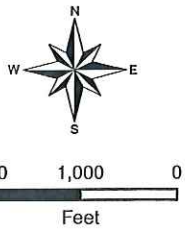
Date:	1/3/13
Dwg. No.:	A8873-05

FIGURE 5

FIGURE 6

CLOVELLY TANK FACILITY- 1





Reference

USGS 7.5 MINUTE QUADRANGLE MAP. GOLDEN MEADOW, LA.

esri Partner Network Silver

LOOP LLC

DEEPWATER PORT COMPLEX

LPDES PERMIT RENEWAL APPLICATION

CLOVELLY TANK FACILITY - 1

LAFOURCHE PARISH

C-K ASSOCIATES, LLC
ENVIRONMENTAL & ENGINEERING CONSULTANTS

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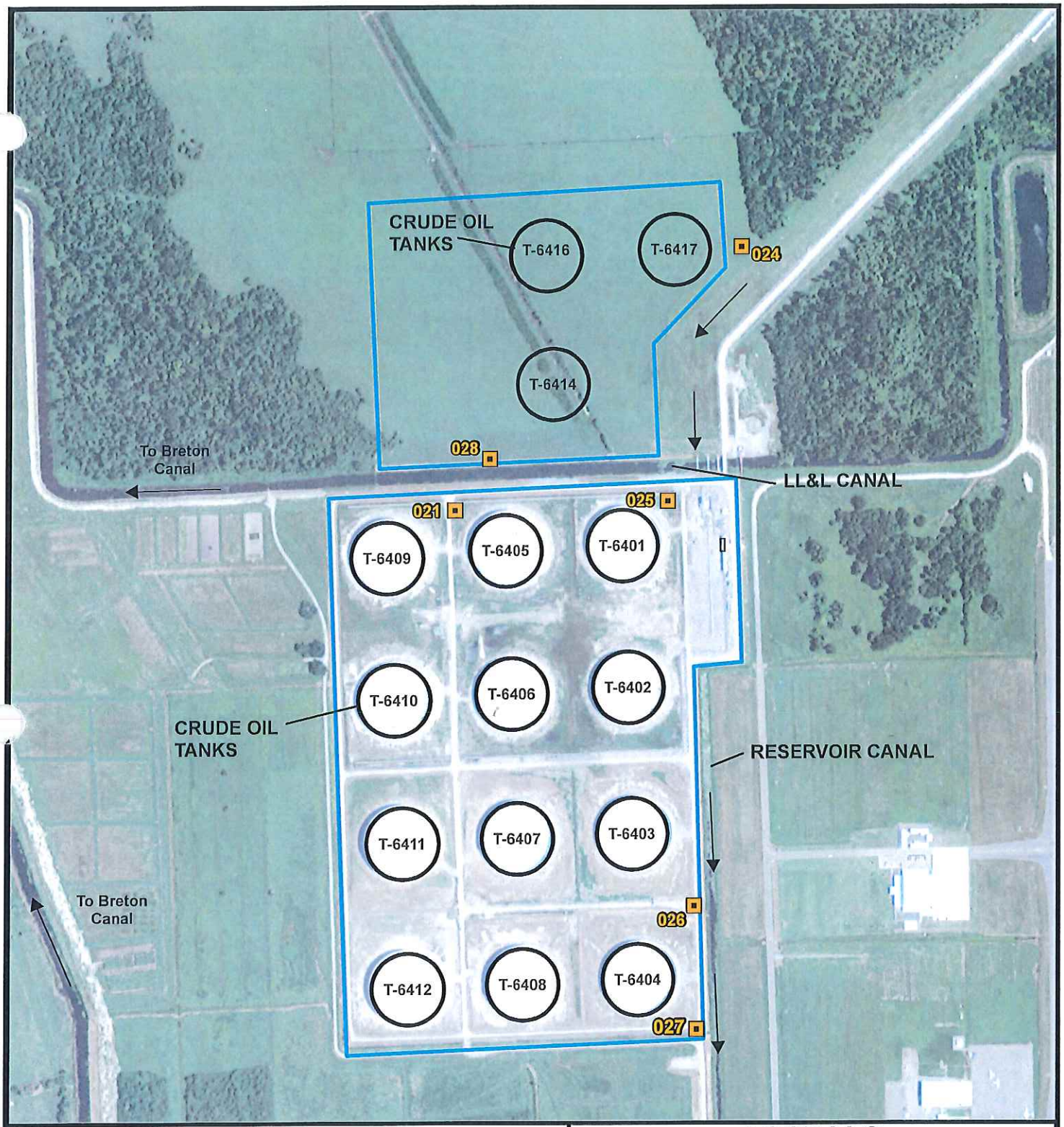
Dwg. No.:	A8873-06

FIGURE 6

FIGURE 7

CLOVELLY TANK FACILITY- 2



Legend

- OUTFALL LOCATION
- FLOW DIRECTION

N W E S

600 300 0

Feet

Reference

IMAGERY 2005 COLOR INFRARED DIGITAL ORTHOPHOTO QUAD FROM STATE OF LOUISIANA (LOSCO).

esri Partner Network Silver

LOOP LLC

DEEPWATER PORT COMPLEX

LPDES PERMIT RENEWAL APPLICATION

CLOVELLY TANK FACILITY - 2

LAFOURCHE PARISH

C-K ASSOCIATES, LLC

ENVIRONMENTAL & ENGINEERING CONSULTANTS

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Approved:	DJL
Date:	1/3/13
Dwg. No.:	A8873-07

FIGURE 7

FIGURE 8

FOURCHON BOOSTER STATION- 1

N
W E
S

2,000 1,000 0
Feet

Reference

USGS 7.5 MINUTE QUADRANGLE MAP. LEEVILLE, LA.

esri Partner Network Silver

LOOP LLC
DEEPWATER PORT COMPLEX

LPDES PERMIT RENEWAL APPLICATION

FOURCHON BOOSTER STATION - 1

LAFOURCHE PARISH

C-K ASSOCIATES, LLC
ENVIRONMENTAL & ENGINEERING CONSULTANTS

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Date:	1/3/13
Dwg. No.:	A8873-08

FIGURE 8

FIGURE 9

FOURCHON BOOSTER STATION- 2

Legend

OUTFALL LOCATION

N
W E
S

500 250 0
Feet

Reference

IMAGERY 2007 NAIP LOUISIANA, LAFOURCHE PARISH.

esri Partner Network Silver

LOOP LLC
DEEPWATER PORT COMPLEX

LPDES PERMIT RENEWAL APPLICATION

FOURCHON BOOSTER STATION - 2

LAFOURCHE PARISH

C-K ASSOCIATES, LLC
ENVIRONMENTAL & ENGINEERING CONSULTANTS

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Dwg. No.:	A8873-09

FIGURE 9

FIGURE 10

SMALL BOAT HARBOR- 1

2,000 1,000 0

Feet

Reference

USGS 7.5 MINUTE QUADRANGLE MAP. LEEVILLE, AND BELLE PASS, LA.

esri Partner Network Silver

LOOP LLC

DEEPWATER PORT COMPLEX

LPDES PERMIT RENEWAL APPLICATION

SMALL BOAT HARBOR - 1

LAFOURCHE PARISH

C-K ASSOCIATES, LLC

ENVIRONMENTAL & ENGINEERING CONSULTANTS

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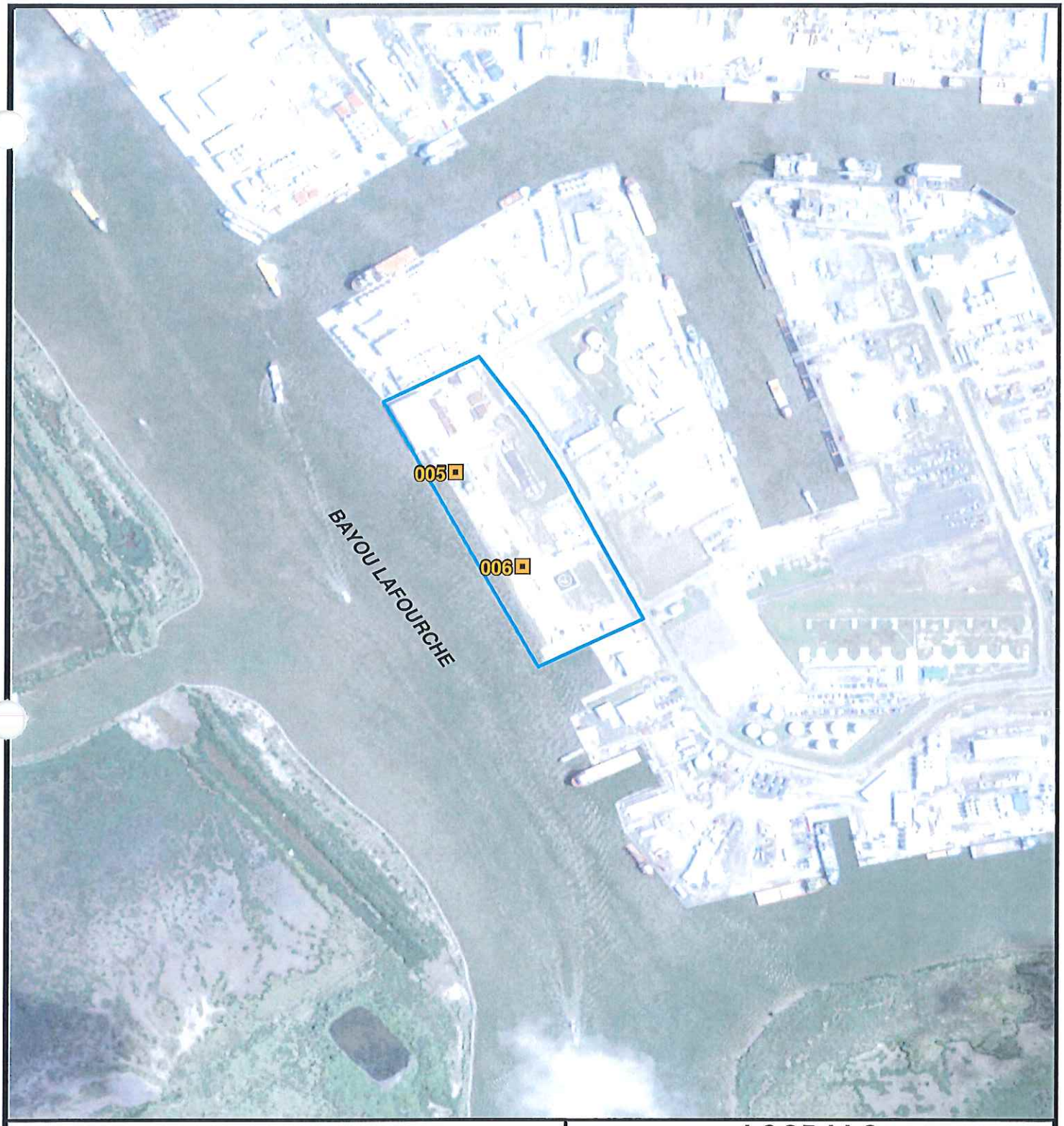
Approved:	DJL
Date:	1/3/13
Dwg. No.:	A8873-10

FIGURE 10

FIGURE 11

SMALL BOAT HARBOR- 2



Legend

OUTFALL LOCATION

N
W E
S

600 300 0
Feet

Reference

IMAGERY 2005 COLOR INFRARED DIGITAL ORTHOPHOTO QUAD FROM STATE OF LOUISIANA (LOSCO).

esri Partner Network Silver

LOOP LLC
DEEPWATER PORT COMPLEX

LPDES PERMIT RENEWAL APPLICATION

SMALL BOAT HARBOR - 2

LAFOURCHE PARISH

C-K ASSOCIATES, LLC
ENVIRONMENTAL & ENGINEERING CONSULTANTS

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Checked:	WCD
Approved:	DJL
Date:	1/3/13
Dwg. No.:	A8873-11

FIGURE 11

FIGURE 12

PUMPING PLATFORM